

Reply to office action dated 6/30/04

REMARKS/ARGUMENTS

In view of the following remarks, Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1, 8, 13, 21, 25, 30, 33, 36, and 38 are amended. Claims 35 and 39-40 are cancelled without
5 prejudice. This amendment is believed to be fully responsive to all issues raised in the 6/30/04 Office Action.

CLAIM REJECTIONS §112

Claims 25 and 33-45 are rejected under §112 second paragraph for failing
10 to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 is rejected on the basis that "the essential structural cooperative relationship between the so called "means for monitoring" and "means for generating" have been omitted". The Office asserts that "such omission
15 amounting to a gap between necessary structural limitations". The Office cites MPEP §2172.01 for support of its rejection. However, Applicant does not believe that the present patent application, either expressly or impliedly, asserts an essential configuration relating to how the "means for generating" becomes aware of the change in the power supply status. Further, MPEP §2172.01 as
20 cited by the Office expressly states "[I]t is not essential to a patentable combination that there be interdependency between the elements of the claimed

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device". As such Applicant respectfully requests that the §112 rejection of claim 25 be withdrawn.

Claim 33 is rejected on the basis that it is unclear what "existing network protocols" may refer to". Claim 33 is amended to define "existing network protocols" as "existing IEEE 1394 network protocols". This amendment is supported in the specification at least at page 4, lines 18-20. As such Applicant respectfully requests the §112 rejection of claim 33 and dependent claims 34 and 36-37 be withdrawn.

Claim 38 is rejected on the basis that it is unclear what "operating protocols" may refer to". Claim 38 is amended to define "operating protocols" as "IEEE 1394 operating protocols". This amendment is supported in the specification at least at page 4, lines 18-20. As such Applicant respectfully requests the §112 rejection of claim 38 and dependent claims 41-45 be withdrawn.

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CLAIM REJECTIONS §102

Claims 1-45 are rejected under §102(e) as being anticipated by US patent No. 6,557,033 to Maeda (hereinafter "Maeda").

20 For the purposes of furthering prosecution a brief summary excerpted from the overview, pages 3-4, of the present application is provided below, followed by a summary of Maeda.

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The present application relates to a system that allows electronic devices or appliances to send data to one another. In one exemplary embodiment, the system may comprise an IEEE 1394 serial bus network. The system can include various IEEE 1394 compliant appliances that can be connected to the IEEE 1394 serial bus. The system also includes one or more circuit(s) for the appliance(s). The circuit(s) monitors a status of the appliance(s) to improve system performance. In some exemplary embodiments, the monitored status can be a power supply status of the appliance. If the circuit detects a change in the power supply status of the appliance, it can cause an IEEE 1394 physical layer chip coupled to the circuit to reset. According to IEEE 1394 protocols, specifically the IEEE 1394 compliant integrated circuits specifications, a physical layer reset will cause a system bus reset that causes each appliance on the system to provide a self-identification (self-ID).

The self-ID data from each appliance includes a status report regarding the appliance's link layer functionality. The status report will indicate either that the link layer is active or inactive. In the case of an inactive link layer, the other appliances on the system will not send data to that appliance. This can prevent a functioning or active appliance from sending data repeatedly to a non-functioning or inactive appliance that cannot receive the data. Additionally, in the case of a power failure to an individual appliance, that appliance's physical layer can be switched to a secondary power supply provided by the system on IEEE 1394 compliant serial cables. This secondary power supply can allow data

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to flow through the inactive appliance's physical layer on a path from one active appliance to another.

Maeda discloses a system for making a host computer automatically
5 recognize a composite apparatus configured to switch from one functionality to another. A device (100) communicating with a host (102) temporarily stops its own power data cable in order to have the host think that the device is disconnected from the data cable. This causes the host to delete the device's driver. After a predetermined time the device restarts its supply of power to the
10 data cable which causes the host to recognize the device as a new device and to therefore install a (new) driver for what the host perceives as a new device.
(Maeda, abstract).

Claim 1 is directed to a system for use with an electronic appliance
15 configurable for use with an IEEE 1394 serial bus, comprising:

- an IEEE 1394 compliant electrical device; and,
- a circuit electronically coupled with said electrical device and configured to cause a reset signal to be generated when a power supply status of the electronic appliance changes;
- 20 • wherein said electrical device and said circuit are configured to be coupled with the IEEE 1394 serial bus and the electronic appliance.

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Claim 1 recites a circuit electronically coupled with said electrical device and configured to cause a reset signal to be generated when a power supply status of the electronic appliance changes.

5 Maeda does not in any form contemplate or disclose the power supply status of the appliance or device changing. Instead Maeda describes a system where a device coupled to a network "can establish a pseudo state of disconnection of the device" from the network. (Maeda, Col. 6, lines 31-32). The pseudo state of disconnection is achieved and sustained for a specific period
10 of time by ongoing active operations of internal components, such as an "R controller 205" of the device 100. (See Maeda, Col. 6 lines 27-32). More specifically, Maeda states "Fig. 5C shows a voltage waveform upon pseudo operation of disconnection and connection of the device from and to the network under control of the R controller 205". Maeda in no way contemplates
15 interruption in the power supply to the appliance. To the contrary Maeda describes total reliance upon a continuous power supply for its system to work. For example, Maeda states that "CPU 801 always monitors change in signal of the network I/F 809". See also specifically (Maeda, col. 9, lines 13-14). To achieve this functionality the CPU must be powered as expected and there is no
20 contemplation of any ramifications should the power supply be interrupted. To the contrary, Maeda's system relies on maintaining power to circuitry within a device to game the network.

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At timing 505 the power supply to the resistor R3 is stopped under control of the R controller 205. This demonstrates the same waveform as when the cable 401 is pulled out. The stop of the power supply causes the voltage of data1 to gradually decrease depending upon the resistance R1 and the capacitance of the cable. After a lapse of a certain time T2 (or timing 506), the potential of data1 becomes smaller than Vol, so as to permit the port input to be recognized as a low level.

Further, the R controller 205 again starts the power supply to the resistor R3 after a lapse of a predetermined time T3 (>2.5 us). Consequently, the PC 102 recognizes the device as if to be disconnected, just as the device of the cable 401 of the downstream port is physically detached. The time T3 is determined as a time in which the PC 102 can delete the driver for the device (the printer driver or the scanner driver) and rearrange the inside of the system. When the power supply is restarted to the resistor R3, the waveform is the same as where the device is attached to the cable 401, and the voltage of data1 increases depending upon the resistance R3 and the capacitance of the cable. After a lapse of a certain time T1 (or timing 508), the potential of data1 exceeds Voh, so as to permit the port input to be recognized as a high level. (Maeda, Col.7, line 5-26.)

Not only does Maeda not describe or contemplate power supply status changes such as power failures, but a power failure might not allow their system to work properly. If there is a power failure to device 100, the PC will unload the driver for device 100, but device 100 will never power up again.

Since it doesn't power-up again, the host will never reload a driver, and there will presumably never be data communications between host and device. It will never report back, but since the host doesn't know anything about the device anymore, it could still continue to send data, taking up bandwidth. This is one of the very problems described in the present application. For at least the above

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reasons, Applicant respectfully requests that the §102 rejection of claim 1 be withdrawn.

Claims 2-7 depend from allowable claim 1 and are similarly allowable.

Claims 8, 13, 21 25 and 26 and their respective dependents 9-12, 14-
5 20, 22-24 and 27-29 are similarly related to power supply status which is not described or contemplated in Maeda. As such, Applicant respectfully requests that the §102 rejection of claims 8-24 and 26-29 be withdrawn.

Claims 30, 33 and 38 amended to contain the limitation "the condition
relating to an ability of the appliance to receive and transmit data over the
10 network". This limitation is supported in the specification as originally filed and is not described or taught by Maeda. As such Applicant respectfully requests the §102 rejections of claims 30, 33 and 38 as well as their respective dependents 31-32, 34, 36-37 and 41-45 be withdrawn.

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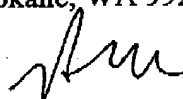
CONCLUSION

Claims 1-34, 36-38 and 41-45 are believed to be in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the present application. Should any issue remain that prevents immediate
5 issuance of the application, the Examiner is encouraged to contact the undersigned attorney to discuss the unresolved issue.

Respectfully Submitted,
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Dated: 9/30/04



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